276,618

STIC-Biotech/ChemLib

From: Hutson, Richard
Sent: Tuesday, December 28, 1999 2:16 PM
To: STIC-Biotech/ChemLib
Subject: literature request-09160067-12/28/99

Could I please have a copy of the following:

GENE THERAPY . 2(1):abstract 43

Thankyou and **Have a Happy Holiday!!**

Richard Hutson
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From: Hutson, Richard
Sent: Tuesday, December 28, 1999 2:18 PM
To: STIC-Biotech/ChemLib
Subject: literature request-09160067-12/28/99

Could I please have a copy of the following:

Cytotechnology 7(2): 121-130 (1991)

Thankyou and **Have a Happy Holiday!!**

Richard Hutson
10D04
AU 1652

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Zgt 000104 1841

NIH NOS
1/3/2000 RC

L5 ANSWER 2 OF 6 MEDLINE
AN 1998419600 MEDLINE DUPLICATE 1
DN 98419600
TI Systemic long-term **delivery** of antibodies in immunocompetent animals using **cellulose sulphate** capsules containing antibody-producing cells.
AU Pelegrin M; Marin M; Noel D; Del Rio M; Saller R; Stange J; Mitzner S; Gunzburg W H; Piechaczyk M
CS Institut de Genetique Moleculaire de Montpellier, UMR 5535/IFR 24, France.
SO GENE THERAPY, (1998 Jun) 5 (6) 828-34.
Journal code: CCE. ISSN: 0969-7128.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199812
EW 19981203
AB Implantation of capsules containing antibody-producing cells into patients would potentially permit systemic long-term **delivery** of antibodies and might, thus, be useful in the development of surveillance treatments for cancers and severe viral diseases. We show that **cellulose sulphate** (CS) capsules containing hybridoma cells, when implanted subcutaneously or in the intraperitoneal cavity, can be used for delivering monoclonal antibodies into the blood-stream of immunocompetent mice for at least several months. In contrast to capsules implanted into the intraperitoneal cavity, which remain mobile and nonvascularized, capsules implanted under the skin form neo-organs which become vascularized within days. This may explain the higher blood concentration of the antibody we have observed in the latter case. Importantly, neither an isolating fibrosis nor an obvious inflammatory response was detected at the **capsule** implantation sites during observation periods as long as 10 months. Finally, no anti-idiotypic immune response against the ectopically delivered antibody was shown to occur. This rules out any potent adjuvant effect of the **cellulose sulphate** matrix that might have stimulated a neutralizing humoral response. Taken together, our data indicate that encapsulation of antibody-producing cells into CS might be used in antibody-based gene/cell therapy approaches.

L11 ANSWER 46 OF 88 MEDLINE DUPLICATE 1
AN 1999043385 MEDLINE
DN 99043385
TI Encapsulation of various recombinant mammalian cell types in different alginate microcapsules.
AU Peirone M; Ross C J; Hortelano G; Brash J L; Chang P L
CS Department of Biology, McMaster University, Hamilton, Ontario, Canada.
SO JOURNAL OF BIOMEDICAL MATERIALS RESEARCH, (1998 Dec 15) 42 (4) 587-96. Journal code: HJJ. ISSN: 0021-9304.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199904
EW 19990401
AB **Microencapsulation** of recombinant "universal" cells with immunoprotective membranes is an alternate approach to somatic **gene therapy**. Therapeutic gene products secreted by these cells can be delivered to different patients without immunosuppression or genetic modification of the host's cells. The encapsulation of different mammalian cell types (epithelial cells, fibroblasts, and myoblasts) is compared among three alginate-based microcapsules: (1) calcium-linked alginate microcapsules with a solubilized core and a poly-L-lysine-alginate-laminated surface; (2) barium-linked alginate beads with a gelled core; and (3) a hybrid formulation of barium-linked alginate beads with a poly-L-lysine-alginate-laminated surface. The mechanical stability of the different microcapsule types, as measured with a cone-and-plate shearing apparatus, was superior in the two barium-linked alginate beads. All cell types maintained high viability (65-90%) in culture after encapsulation. The recombinant gene products secreted by these cells (human growth hormone MW = 22,000, human factor IX MW = 57,000, and murine beta-glucuronidase MW = 300,000) were able to traverse the three microcapsule types at similar rates. Cell numbers within the microcapsules increased twofold to > 20-fold over 4 weeks, depending on the cell type. Epithelial and myoblast cell numbers were not affected by microcapsule formulation; however, fibroblasts proliferated the most in the calcium-linked alginate spheres. These results show that for culturing fibroblasts in a mechanically stable environment the classical calcium-linked microcapsules are adequate. However, where mechanical stability is a more critical requirement, the solid barium-linked gelled beads are more appropriate choices.

L11 ANSWER 61 OF 88 SCISEARCH COPYRIGHT 1999 ISI (R)
AN 1998:114755 SCISEARCH
GA The Genuine Article (R) Number: BK30T
TI **Microencapsulation** of cells - Medical applications
AU Sun A M (Reprint)
CS UNIV TORONTO, FAC MED, DEPT PHYSIOL, 1 KINGS COLL CIRCLE, TORONTO, ON M5S 1A8, CANADA (Reprint)
CYA CANADA
SO ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, (DEC 1997) Vol. 831, pp. 271-279.
Publisher: NEW YORK ACAD SCIENCES, 2 EAST 63RD ST, NEW YORK, NY 10021.
ISSN: 0077-8923.
DT Article; Journal
FS LIFE
LA English
REC Refe